

Date: Thursday, 2/7/2008 10:54:22 AM
 User: Kim Johnston

Process Sheet

| | |
|---|---|
| Customer : CU-DAR001 Dart Helicopters Services | Drawing Name : SADDLE FITTING, FWD (OUTBOARD/INBOARD) |
| Job Number : 37283 | |
| Estimate Number : 10531 | |
| P.O. Number : | Part Number : D2572 |
| This Issue : 2/7/2008 S.O. No. : | Drawing Number : D2572 REV E |
| Prsht Rev. : NC | Project Number : N/A |
| First Issue : 1/1 Type : MACHINED PARTS | Drawing Revision : E |
| Previous Run : 36323 | Material : |
| Written By : <u>JA 08 02 01</u> | Due Date : 2/28/2008 Qty: 12 Um: Each |
| Checked & Approved By : <u>JA 08 02 01</u> | |
| Comment : Est: 1 02.10.02 Re-format; Change to Dwg Rev. D & incorporated D2572 KJ | |

Additional Product

Job Number:



| | | |
|---------|-----------------------|---------------|
| Seq. #: | Machine Or Operation: | Description : |
|---------|-----------------------|---------------|

| | | |
|-----|----------|-------------------------|
| 1.0 | D6101005 | 7075-T7351 8.25X5.0X2.5 |
|-----|----------|-------------------------|



Comment: Qty.: 1.0000 Each(s)/Unit Total : 12.0000 Each(s)
 7075-T7351 8.25X5.0X2.5
 Make from D6101-005 billet for D2572
 Ensure that grain is along 5.00" length
 Batch No: 13, 138

JA 08/02/26

(12)

| | | |
|-----|-------|--------------------------------|
| 2.0 | HAAS1 | HAAS CNC VERTICAL MACHINING #1 |
|-----|-------|--------------------------------|



Comment: HAAS CNC VERTICAL MACHINING #1

Program Batch No. 3278 Double check by: JA

1-Machine Step No 1 per Folio FA051 and inspect per attached Dimension Sheets
 2-Machine Step No 2 per Folio FA051 and inspect per attached Dimension Sheets
 3-Machine Step No 3 per Folio FA051 and inspect per attached Dimension Sheets
 4-Deburr and remove all machining marks
 5-Tumble to remove shap edges.

JA/SA 08/03/01

(12)

| | | |
|-----|---------------|------------------------------|
| 3.0 | MILLING CONV. | CONVENTIONAL MILLING MACHINE |
|-----|---------------|------------------------------|



Comment: CONVENTIONAL MILLING MACHINE

Machine keyway as per dwg D2571 & D2572

JA/SA 08/03/01

(12)

| | | |
|-----|-----|--|
| 4.0 | QC2 | INSPECT PARTS AS THEY COME OFF MACHINE |
|-----|-----|--|



Comment: INSPECT PARTS AS THEY COME OFF MACHINE

JA/SA 08/03/01

(12)

Dart Aerospace Ltd

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes ☒ No ☐ DQA: ☒ Date: 08/03/06
 QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

NOTE: Date & initial all entries

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: SADDLE FITTING, FWD (OUTBOARD/INBOARD)

Job Number: 37283

Part Number: D2572

Job Number:



Seq. #:

Machine Or Operation:

Description :

5.0

QC8

SECOND CHECK



Comment: SECOND CHECK

SC 08.05.05

(12)

6.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Acid etch and Alodine as per QSI 005 4.1

BK 08.03.03

(12)

7.0

POWDER COATING

POWDER COATING



Comment: POWDER COATING

Powder Coat White Gloss (Ref: 4.3.5.1) as per QSI 005 4.3

FL 08/03/04

(12)

8.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT

M-L

08/03/04

(12X)

9.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: 432

8/3/5

SC

(12X)

10.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

08/03/06

(12)

Job Completion



2008/3/05

(12)

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

NOTE: Date & initial all entries

| | |
|---|---------------------------|
| DART AEROSPACE LTD | Work Order: 37283 |
| Description: Saddle, Fwd Inboard | Part Number: D2572 |
| Inspection Dwg: D2572 Rev. E | Page 1 of 1 |

Inspect dimensions highlighted on inspection sheet drawing D2572 Rev. E and record below:

| | | | | Recorded Actual Dimensions | | | | | |
|---------------|-------|-------|----------------|----------------------------|-------|-------|-------|----|------|
| Dim | Min | Max | Go/No Go Gauge | 1 | 2 | 3 | 4 | By | Date |
| A | 0.438 | 0.443 | DT8682 | 0.442 | .442 | .442 | .442 | | |
| B | 1.745 | 1.755 | | 1.750 | 1.750 | 1.750 | 1.750 | | |
| C | 3.495 | 3.505 | | 3.498 | 3.498 | 3.500 | 3.500 | | |
| D | 1.745 | 1.755 | | 1.750 | 1.750 | 1.750 | 1.750 | | |
| E | 7.990 | 8.010 | | 8.000 | 8.005 | 8.006 | 8.004 | | |
| F | 0.490 | 0.510 | | 0.500 | .502 | .503 | .494 | | |
| G | 0.257 | 0.262 | DT8683 | 0.260 | 0.260 | 0.260 | .260 | | |
| H | 0.375 | 0.380 | DT8684 | 0.377 | 0.377 | 0.377 | .377 | | |
| I | 0.490 | 0.510 | | 0.501 | 0.500 | 0.500 | .501 | | |
| J | 1.174 | 1.184 | | 1.179 | 1.180 | 1.180 | 1.180 | | |
| K | 0.558 | 0.578 | | 0.570 | 0.568 | 0.570 | .577 | | |
| L | 1.174 | 1.184 | | 1.179 | 1.180 | 1.180 | 1.180 | | |
| M | 1.490 | 1.500 | | 1.496 | 1.496 | 1.496 | 1.496 | | |
| N | 2.495 | 2.505 | | 2.499 | 2.500 | 2.500 | 2.500 | | |
| O | 3.869 | 3.879 | | 3.873 | 3.874 | 3.874 | 3.874 | | |
| P | 0.115 | 0.135 | | 0.125 | 0.126 | 0.123 | .123 | | |
| Q | 0.115 | 0.135 | | 0.135 | 0.135 | 0.135 | .135 | | |
| R | 0.240 | 0.260 | | 0.250 | 0.251 | 0.249 | .250 | | |
| S | 0.115 | 0.135 | | 0.135 | 0.126 | 0.127 | .126 | | |
| T | 0.178 | 0.198 | | 0.188 | 0.188 | 0.188 | .188 | | |
| U | 2.940 | 2.980 | | 2.958 | 2.960 | 2.960 | 2.960 | | |
| V | 0.230 | 0.250 | | 0.238 | 0.233 | 0.235 | .238 | | |
| W | 0.115 | 0.135 | | 0.122 | .126 | .124 | .123 | | |
| X | 0.307 | 0.312 | | 0.310 | .308 | .310 | .310 | | |
| Y | 0.760 | 0.765 | | .762 | .762 | .762 | .762 | | |
| Z | 0.352 | 0.372 | | 0.371 | .362 | .366 | .365 | | |
| AA | 0.470 | 0.530 | | 0.500 | 0.500 | 0.500 | .500 | | |
| AB | 0.615 | 0.635 | | 0.625 | .630 | .631 | .631 | | |
| AC | 0.053 | 0.073 | | 0.063 | 0.063 | 0.063 | .063 | | |
| AD | 0.240 | 0.260 | | 0.245 | 0.244 | 0.245 | .245 | | |
| AE | 1.375 | 1.395 | | 1.387 | 1.388 | 1.387 | 1.388 | | |
| AF | 0.115 | 0.135 | | 0.135 | .135 | .135 | .135 | | |
| AG | 0.240 | 0.280 | | 0.256 | 0.259 | 0.250 | .255 | | |
| AH | 0.240 | 0.260 | | 0.247 | 0.243 | 0.245 | .248 | | |
| AI | 2.000 | 2.020 | | 2.000 | 2.001 | 2.000 | 2.001 | | |
| AJ | 0.023 | 0.043 | | .030 | .030 | .030 | .030 | | |
| Accept/Reject | | | | | | | | | |

| |
|------------------------------|
| Measured by: <i>gmk / SA</i> |
| Date: 02/02/28 |

| |
|-----------------------|
| Audited by: <i>EC</i> |
| Date: 08.03.03 |

| Rev | Date | Change | Revised by | Approved |
|-----|----------|---|------------|----------|
| A | | New Issue | RF | |
| B | 02.09.24 | Re-format; Added Rev. D | KJ | |
| C | 02.10.11 | Re-format; Added DT8682, DT8683, DT8684 | KJ | |
| D | 05.05.05 | Added dimension AI | KJ/RF | |
| E | 05.12.05 | Added dimension AJ | KJ/JLM | |

| | | |
|---|---------------------|-------------|
| DART AEROSPACE LTD | Work Order: | 37283 |
| Description: Saddle, Fwd Inboard | Part Number: | D2572 |
| Inspection Dwg: D2572 Rev. E | | Page 1 of 1 |

Inspect dimensions highlighted on inspection sheet drawing D2572 Rev. E and record below:

| | | | | Recorded Actual Dimensions | | | | | |
|---------------|-------|-------|----------------|----------------------------|-------|-------|-------|----|------|
| Dim | Min | Max | Go/No Go Gauge | 1 | 2 | 3 | 4 | By | Date |
| A | 0.438 | 0.443 | DT8682 | .442 | .442 | .442 | .442 | | |
| B | 1.745 | 1.755 | | 1.750 | 1.750 | 1.750 | 1.750 | | |
| C | 3.495 | 3.505 | | 3.500 | 3.500 | 3.500 | 3.500 | | |
| D | 1.745 | 1.755 | | 1.750 | 1.750 | 1.750 | 1.750 | | |
| E | 7.990 | 8.010 | | 8.003 | 8.003 | 8.003 | 8.002 | | |
| F | 0.490 | 0.510 | | .503 | .503 | .504 | 0.507 | | |
| G | 0.257 | 0.262 | DT8683 | .258 | .258 | .258 | .258 | | |
| H | 0.375 | 0.380 | DT8684 | .376 | .376 | .376 | .378 | | |
| I | 0.490 | 0.510 | | .502 | .502 | .501 | 0.501 | | |
| J | 1.174 | 1.184 | | 1.179 | 1.179 | 1.178 | 1.178 | | |
| K | 0.558 | 0.578 | | .574 | .574 | .575 | 0.570 | | |
| L | 1.174 | 1.184 | | 1.179 | 1.179 | 1.178 | 1.178 | | |
| M | 1.490 | 1.500 | | 1.493 | 1.493 | 1.493 | 1.494 | | |
| N | 2.495 | 2.505 | | 2.500 | 2.500 | 2.500 | 2.500 | | |
| O | 3.869 | 3.879 | | 3.874 | 3.874 | 3.874 | 3.871 | | |
| P | 0.115 | 0.135 | | .123 | .123 | .123 | .124 | | |
| Q | 0.115 | 0.135 | | .135 | .135 | .135 | 0.135 | | |
| R | 0.240 | 0.260 | | .250 | .250 | .250 | .250 | | |
| S | 0.115 | 0.135 | | .124 | .125 | .124 | .130 | | |
| T | 0.178 | 0.198 | | .188 | .188 | .188 | .188 | | |
| U | 2.940 | 2.980 | | 2.960 | 2.960 | 2.960 | 2.958 | | |
| V | 0.230 | 0.250 | | .238 | .238 | .235 | 0.239 | | |
| W | 0.115 | 0.135 | | .120 | .121 | .121 | .126 | | |
| X | 0.307 | 0.312 | | .305 | .305 | .309 | .304 | | |
| Y | 0.760 | 0.765 | | .762 | .762 | .766 | .766 | | |
| Z | 0.352 | 0.372 | | .367 | .367 | .361 | 0.363 | | |
| AA | 0.470 | 0.530 | | .500 | .500 | .500 | .508 | | |
| AB | 0.615 | 0.635 | | .630 | .630 | .630 | 0.626 | | |
| AC | 0.053 | 0.073 | | .063 | .063 | .063 | .063 | | |
| AD | 0.240 | 0.260 | | .250 | .250 | .240 | .240 | | |
| AE | 1.375 | 1.395 | | 1.388 | 1.389 | 1.387 | 1.388 | | |
| AF | 0.115 | 0.135 | | .135 | .135 | .135 | 0.135 | | |
| AG | 0.240 | 0.280 | | .255 | .255 | .255 | .250 | | |
| AH | 0.240 | 0.260 | | .250 | .250 | .250 | 0.245 | | |
| AI | 2.000 | 2.020 | | 2.001 | 2.001 | 2.001 | 2.001 | | |
| AJ | 0.023 | 0.043 | | .030 | .030 | .033 | .033 | | |
| Accept/Reject | | | | | | | | | |

| | |
|--------------|----------|
| Measured by: | SA |
| Date: | 08/02/28 |

| | |
|-------------|----------|
| Audited by: | EC |
| Date: | 08.03.03 |

| Rev | Date | Change | Revised by | Approved |
|-----|----------|---|------------|----------|
| A | | New Issue | RF | |
| B | 02.09.24 | Re-format; Added Rev. D | KJ | |
| C | 02.10.11 | Re-format; Added DT8682, DT8683, DT8684 | KJ | |
| D | 05.05.05 | Added dimension AI | KJ/RF | |
| E | 05.12.05 | Added dimension AJ | KJ/JLM | |

| | | |
|---|---------------------|--------------------|
| DART AEROSPACE LTD | Work Order: | 37283 |
| Description: Saddle, Fwd Inboard | Part Number: | D2572 |
| Inspection Dwg: D2572 Rev. E | | Page 1 of 1 |

Inspect dimensions highlighted on inspection sheet drawing D2572 Rev. E and record below:

| | | | | Recorded Actual Dimensions | | | | | |
|---------------|-------|-------|-------------------|----------------------------|-------|-------|-------|----|------|
| Dim | Min | Max | Go/No Go Gauge | 1 | 2 | 3 | 4 | By | Date |
| A | 0.438 | 0.443 | DT8682 | .442 | .442 | .442 | .442 | | |
| B | 1.745 | 1.755 | | 1.750 | 1.750 | 1.750 | 1.750 | | |
| C | 3.495 | 3.505 | | 3.506 | 3.506 | 3.500 | 3.506 | | |
| D | 1.745 | 1.755 | | 1.750 | 1.750 | 1.750 | 1.750 | | |
| E | 7.990 | 8.010 | | 8.001 | 8.001 | 8.000 | 8.000 | | |
| F | 0.490 | 0.510 | | 1.501 | .507 | .502 | .500 | | |
| G | 0.257 | 0.262 | DT8683 | .248 | 0.259 | .259 | .259 | | |
| H | 0.375 | 0.380 | DT8684 | .377 | 0.378 | .378 | .378 | | |
| I | 0.490 | 0.510 | | .506 | 0.506 | .506 | .506 | | |
| J | 1.174 | 1.184 | | 1.178 | 1.178 | 1.178 | 1.178 | | |
| K | 0.558 | 0.578 | | 0.576 | 0.576 | .568 | .568 | | |
| L | 1.174 | 1.184 | | 1.178 | 1.178 | 1.178 | 1.178 | | |
| M | 1.490 | 1.500 | | 1.493 | 1.494 | 1.494 | 1.494 | | |
| N | 2.495 | 2.505 | | 2.506 | 2.506 | 2.500 | 2.506 | | |
| O | 3.869 | 3.879 | | 3.871 | 3.871 | 3.871 | 3.871 | | |
| P | 0.115 | 0.135 | | .123 | 0.123 | .124 | .123 | | |
| Q | 0.115 | 0.135 | | .135 | 0.135 | .135 | .135 | | |
| R | 0.240 | 0.260 | | .250 | 0.249 | .250 | .249 | | |
| S | 0.115 | 0.135 | | .118 | 0.126 | .126 | .124 | | |
| T | 0.178 | 0.198 | | .188 | 0.188 | .188 | .188 | | |
| U | 2.940 | 2.980 | | 2.960 | 2.960 | 2.960 | 2.959 | | |
| V | 0.230 | 0.250 | | .238 | 0.238 | .236 | .234 | | |
| W | 0.115 | 0.135 | | .125 | .120 | .124 | .124 | | |
| X | 0.307 | 0.312 | | .309 | .309 | .309 | .309 | | |
| Y | 0.760 | 0.765 | | .761 | .760 | .760 | .760 | | |
| Z | 0.352 | 0.372 | | .366 | .366 | .362 | .362 | | |
| AA | 0.470 | 0.530 | | .500 | 0.500 | .500 | .500 | | |
| AB | 0.615 | 0.635 | | .625 | .628 | .627 | .629 | | |
| AC | 0.053 | 0.073 | | .063 | 0.063 | .063 | .063 | | |
| AD | 0.240 | 0.260 | | .241 | 0.247 | .246 | .244 | | |
| AE | 1.375 | 1.395 | | 1.390 | 1.390 | 1.386 | 1.387 | | |
| AF | 0.115 | 0.135 | | .135 | 0.135 | .135 | .135 | | |
| AG | 0.240 | 0.280 | | .250 | 0.250 | .244 | .245 | | |
| AH | 0.240 | 0.260 | | .246 | 0.247 | .244 | .244 | | |
| AI | 2.000 | 2.020 | | 2.002 | 2.001 | 2.000 | 2.000 | | |
| AJ | 0.023 | 0.043 | | .033 | .033 | .033 | .033 | | |
| Accept/Reject | | | | | | | | | |

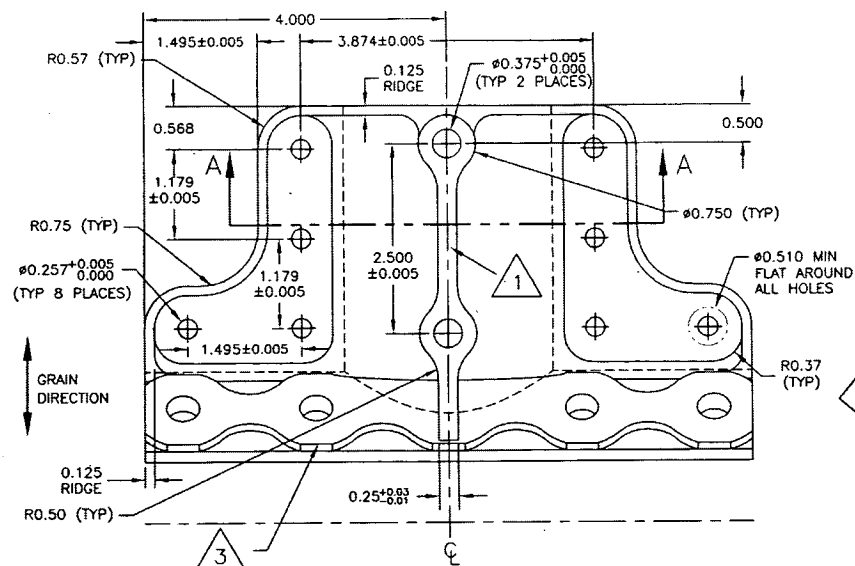
| | |
|--------------|----------|
| Measured by: | <i>g</i> |
| Date: | 08/03/01 |

| | |
|-------------|-----------|
| Audited by: | <i>RG</i> |
| Date: | 08.05.05 |

| Rev | Date | Change | Revised by | Approved |
|-----|----------|---|------------|-----------|
| A | | New Issue | RF | |
| B | 02.09.24 | Re-format; Added Rev. D | KJ | |
| C | 02.10.11 | Re-format; Added DT8682, DT8683, DT8684 | KJ | |
| D | 05.05.05 | Added dimension AI | KJ/RF | |
| E | 05.12.05 | Added dimension AJ | KJ/JLM | <i>JA</i> |

RELEASED

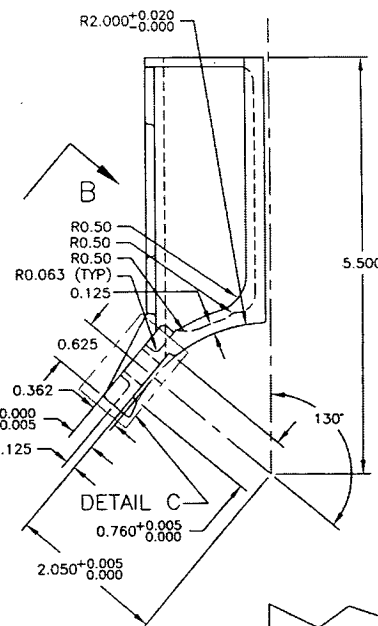
05.12.06



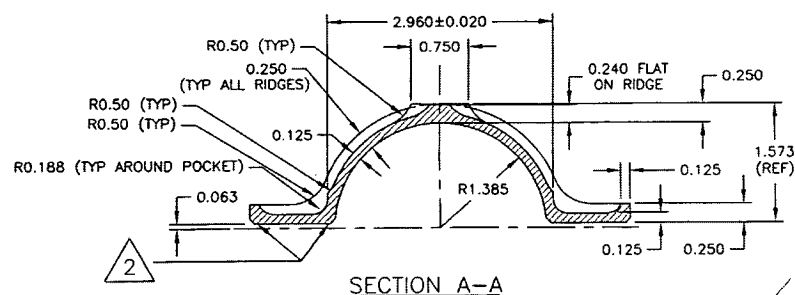
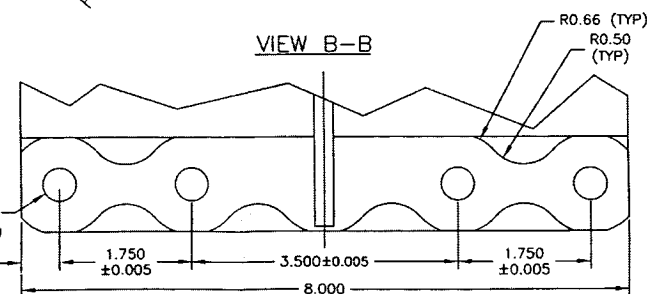
NOTES

MATERIAL: 7075-T7351 (QQ-A-250/12)
(REF DART SPEC. D6102-003)
FINISH: ACID ETCH, ALODINE PER DART QSI 005 4.1
POWDER COAT GLOSS WHITE (REF 4.3.5.1) PER
DART QSI 005 4.3
BREAK ALL SHARP EDGES 0.010 TO 0.020
TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

- 1 ENGRAVE PART AND BATCH NUMBER IN THIS AREA TO MAX DEPTH OF 0.010
2 CHAMFER 0.063" x 45° AROUND THIS SURFACE (TYPICAL 2 PLACES)
3 CHAMFER 0.063 x 45° ALL AROUND
4 CHAMFER 0.033 x 45° (SEE DETAIL C) E



VIEW B-B



SECTION A-A

DETAIL C
SCALE 2:1

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OR COPIED OR COMMUNICATED TO ANY OTHER
PERSON WITHOUT WRITTEN PERMISSION FROM
DART AEROSPACE LTD.

| | | |
|---------|----------|--|
| E | 05.07.13 | ADD CHAMFER ON RIDGE NOTE 4 |
| D | 02.09.06 | ADD RIDGES; TIGHTEN TOLERANCES |
| C | 99.10.22 | INCORP. DEO 9123/9079/9102 ADD DIMENSIONS PER TSR A1177 |
| B | 96.12.02 | ADD GRAIN DIR., 0.438 WAS 0.425 |
| A | 96.09.16 | NEW ISSUE |
| DESIGN | DS | DRAWN BY PH |
| CHECKED | | APPROVED |
| DATE | 05.07.13 | TITLE |
| | | INNER FWD SADDLE |
| | | SCALE 2:3 |

DART AEROSPACE LTD.
MARKHAM, ONTARIO, CANADA

DRAWING NO. 02572
SHEET 1 OF 1

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 372283

